WHAT IS CLAIMED IS:

1.   An apparatus for correlating a first data sequence with a local code sequence, comprising:

a first sub-chip delay circuit for generating a second data sequence that is offset by a fraction of a chip relative to the first data sequence;

a first despreader circuit for despreading the first data sequence with the local code sequence to produce a first despread result;

a second despreader circuit for despreading the second data sequence with the local code sequence to produce a second despread result; and

a first sum-and-accumulate circuit for adding the first despread result with the second despread result to produce a first summed result.

2.   The apparatus of claim 1, further comprising:

a second sub-chip delay circuit for generating a third data sequence that is offset by two fractions of a chip relative to the first data sequence;

a third despreader circuit for despreading the third data sequence with the local code sequence to produce a third despread result;

a second sum-and-accumulate circuit for adding the second despread result with the third despread result to produce a second summed result.

3.   The apparatus of claim 2, wherein the second data sequence is offset by one-half of a chip relative to the first data sequence.

4.   The apparatus of claim 3, wherein the third data sequence is offset by one-half of a chip with respect to the second data sequence and by one chip with respect to the first sequence.

5.   The apparatus of claim 1, further comprising a code generator for generating the local code sequence.

6.   The apparatus of claim 6, wherein the local code sequence comprises a pseudorandom noise sequence.

7.   In a spread-spectrum communication device, a method of determining a sub-chip offset of a signal in relation to a local code sequence, comprising:

generating a first data sequence, a second data sequence and a third data sequence from the signal, wherein the first data sequence and the second data sequence are offset by a fraction of a chip and wherein the first data sequence and the third data sequence are offset by two fractions of a chip;

despreading the first data sequence, the second data sequence and the third data sequence with the local code sequence in parallel to respectively produce a first despread result, a second despread result and a third despread result;

summing the first despread result and the second despread result to produce a summed result.

8. The method of claim 7, further comprising accumulating the summed result over a pre-determined period of time to produce a summed-and-accumulated despread result.

9. The method of claim 8, further comprising analyzing the summed-and-accumulated despread result to determine the sub-chip offset of the signal.

10. The method of claim 7, wherein the first data sequence and the second data sequence are offset by one half of a chip and wherein the first data sequence and the third data sequence are offset by one chip.

11. A communication device, comprising:

a receiver circuit for receiving a signal that is spread with a first code sequence;

a base-band processor having a code generator for generating a local code sequence and

a searcher, wherein the searcher comprises:

(a)   a circuit for generating a first data sequence from the signal,

(b)   a first sub-chip delay circuit for generating a second data sequence from the signal, wherein the first data sequence and the second data sequence are offset by a fraction of a chip,

(b)   a first despreader for spreading the first data sequence with the local code sequence to produce a first despread result,

(c)   a second despreader for spreading the second data sequence with the local code sequence to produce a second despread result, and

(d)   a first sum-and-accumulate circuit for adding the first

5   despread result and the second despread result to produce a first summed result and for accumulating the first summed result over a pre-determined period of time to generate a first accumulated result;

wherein the base-band processor is configured for analyzing the first

10   accumulated result to determine whether the first code sequence matches the local code sequence.

12.   The communication device of claim 11, wherein the searcher further comprises:

15   a second sub-chip delay circuit for generating a third data sequence from the signal, wherein the third data sequence and the first data sequence are offset by two fractions of a chip,

a third despreader for spreading the third data sequence with the local code sequence to produce a third despread result, and

20   a second sum-and-accumulate circuit for adding the second despread result and the third despread result to produce a second summed result and for accumulating the second summed result over the pre-determined period of time to produce a second accumulated result.

25   13.   The communication device of claim 12, wherein the base-band processor analyzes the first accumulated result and the second accumulated result to determine the sub-chip offset of the first code sequence.

14.   The communication device of claim 11, wherein the first data sequence and

30   the second data sequence are offset by one half of a chip.

15.   The communication device of claim 14, wherein the first data sequence and the third data sequence are offset by one chip.

35   16.   An apparatus for performing code correlation, comprising:

a first sub-chip delay circuit for generating a second data sequence that is offset by one half of a chip relative to the first data sequence;

a second sub-chip delay circuit for generating a third data sequence that is offset by one half of a chip relative to the second data sequence and by one chip relative to the first data sequence;

a code generator for generating a local code sequence;

a first despreader circuit for despreading the first data sequence with the local code sequence to produce a first despread result;

a second despreader circuit for despreading the second data sequence with the local code sequence to produce a second despread result; and

a third despreader circuit for despreading the second offset data sequence with the local code sequence to produce a third despread result;

a first sum-and-accumulate circuit for adding the first despread result with the second despread result to produce a first summed result, and for accumulating the first summed result over a pre-determined period of time to generate a first accumulated result; and

a second sum-and-accumulate circuit for adding the second despread result with the third despread result to produce a second summed result and for accumulating the second summed result over the pre-determined period of time to generate a second accumulated result.

17. A communication device, comprising:

a receiver circuit for receiving a signal that is spread with a first code sequence;

a base-band processor having a code generator for generating a local code sequence and

a searcher comprising:

(a)   a circuit for generating a first data sequence from the signal,

(b)   a first sub-chip delay circuit for generating a second data sequence from the signal, wherein the first data sequence and the second data sequence are offset by one half of a chip,

(c)   a second sub-chip delay circuit for generating a third data sequence from the signal, wherein the third data sequence and the first data sequence are offset by one chip,

(d)   a first despreader for spreading the first data sequence with the local code sequence to produce a first despread result,

(e)   a second despreader for spreading the second data sequence with the local code sequence to produce a second despread result,

(f)   a third despreader for spreading the third data sequence with the local code sequence to produce a third despread result,

(g)   a first sum-and-accumulate circuit for adding the first despread result and the second despread result to produce a first summed result and for accumulating the first summed result over a pre-determined period of time to generate a first accumulated result, and

(h)   a second sum-and-accumulate circuit for adding the second despread result and the third despread result to produce a second summed result and for accumulating the second summed result over the pre-determined period of time to produce a second accumulated result;

wherein the base-band processor is configured for analyzing the first accumulated result to determine whether the local code sequence matches the first code sequence.